```
ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS
L4
    2002:695722 CAPLUS
AN
    Methods for treating genetically-defined proliferative disorders
ΤT
    characterized by a non-random chromosomal aberration with heat shock
    protein HSP90 inhibitors
    Fritz, Lawrence C.; Burrows, Francis J.
IN
    Conforma Therapeutics Corp., USA
PA
    PCT Int. Appl., 390 pp.
SO
    CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
                                          APPLICATION NO. DATE
                    KIND DATE
     PATENT NO.
                                          _____
                           20020912
                                         WO 2002-US6518 20020301
    WO 2002069900
                    A2
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ. TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-272751P
                            20010301
                      Ρ
     Applicants report that many proliferative disorders are assocd, with
     aberrant proteins that exhibit a dependence on HSP90. In some cases
     this dependence manifests as a heightened sensitivity to HSP90
     inhibitors such that affected cells can be selectively treated using a
     dosage that is effective against the aberrant cells but which is
     ineffective or less effective against normal cells. The aberrant
     proteins may also exhibit increased proteasome-dependent degrdn. when in
     the presence of HSP90 inhibitors. While the invention is not limited by
     mechanism, increased dependence, sensitivity, and /or disposition to
     preferential degrdn. may advantageously be used to treat corresponding
     proliferative diseases according to the methods of the invention. The
     invention relates generally to methods of treating cell proliferative
     diseases with HSP90 inhibitors and, depending on the specific aspect and
     embodiment(s) claimed, to the treatment of proliferative diseases that
     are assocd. with fusion proteins, e.g., bcr/abl, or mutant proteins or
     cellular protein isoforms, e.g., mutant forms of p53.
     459174-35-7P 459174-38-0P 459174-42-6P
IT
     459174-45-9P
     RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (methods for treating genetically-defined proliferative disorders
        characterized by non-random chromosomal aberration with heat shock
        protein HSP90 inhibitors)
RN
     459174-35-7 CAPLUS
CN
     INDEX NAME NOT YET ASSIGNED
```

PAGE 1-B

RN 459174-38-0 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry. Double bond geometry as described by ${\tt E}$ or ${\tt Z}$.

PAGE 1-A

MeO

OH

S

E

S

R

OH

S

R

о́ме

PAGE 1-B

O O (CH2) 3 N (CH2) 3 N

RN 459174-42-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry. Double bond geometry as described by E or ${\bf Z}$.

PAGE 1-A

PAGE 1-B

≫0

RN 459174-45-9 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry. Double bond geometry as described by E or Z.

PAGE 1-B

```
ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
T.4
    2000:742091 CAPLUS
ΑN
    133:305587
DN
    Methods and compositions using bifunctional hsp-binding derivatives for
ΤI
    degradation and/or inhibition of HER-family tyrosine kinases and
     treatment of cancer
     Rosen, Neal; Kuduk, Scott D.; Danishefsky, Samuel J.; Zheng, Furzhong
IN
     F.; Sepp-Lorenzino, Laura; Ouerfelli, Ouathek
     Sloan-Kettering Institute for Cancer Research, USA
PA
     PCT Int. Appl., 21 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
                                          APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
                                          _____
     -------
                     A1 20001019 WO 2000-US9512 20000407
     WO 2000061578
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                           20000407
                                         EP 2000-921985
                           20020109
                       A1
     EP 1169319
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                           US 2001-960665
                                                            20010921
                            20020418
                       A1
     US 2002045570
                            19990409
 PRAI US 1999-128593P
                       P
                            20000407
     WO 2000-US9512
                       W
     Bifunctional mols. comprising two hsp-binding moieties which bind to
AB
     hsp90 in the pocket to which ansamycin antibiotics bind connected via a
     linker are effective for inducing the degrdn. and/or inhibition of HER-
      family tyrosine kinases. For example, a compd. of two geldanamycin
     moieties joined by a four-carbon linker provides selective degrdn. of
      HER-family tyrosine kinases, without substantially affecting other
      kinases. These compds. can be used for treatment of HER-pos. cancers
      with reduced toxicity, since these compds. potently kill cancer cells
      but affect fewer proteins than geldanamycin. Compd. prepn. is descibed.
      280145-12-2P 280145-13-3P 280145-14-4P
      280145-15-5P 301643-24-3P 301643-25-4P
      301643-26-5P 301643-27-6P 301643-28-7P
      RL: BAC (Biological activity or effector, except adverse); BSU
      (Biological study, unclassified); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (Uses) (bifunctional hsp-binding deriv. for degrdn. and/or inhibition of
         HER-family tyrosine kinase and cancer treatment)
      280145-12-2 CAPLUS
 RN
      Geldanamycin, 17,17'-(1,4-butanediyldiimino)bis[17-demethoxy- (9CI)
 CN
      INDEX NAME)
```

PAGE 1-B

PAGE 1-C

Me
OMe
N
OMe
N
NH2
N
Me
OMe
Me
Me

RN 280145-13-3 CAPLUS
CN Geldanamycin, 17,17'-(1,7-heptanediyldiimino)bis[17-demethoxy- (9CI)
(CA INDEX NAME)

PAGE 1-C

RN 280145-14-4 CAPLUS

CN Geldanamycin, 17,17'-(1,9-nonanediyldiimino)bis[17-demethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by ${\tt E}$ or ${\tt Z}$.

PAGE 1-B

280145-15-5 CAPLUS RN

Geldanamycin, 17,17'-(1,11-undecanediyldiimino)bis[17-demethoxy- (9CI) CN (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as described by E or Z.

PAGE 1-B

PAGE 1-C

301643-24-3 CAPLUS RN

Geldanamycin, 17,17'-(1,12-dodecanediyldiimino)bis[17-demethoxy- (9CI) CN (CA INDEX NAME)

PAGE 1-B

RN 301643-25-4 CAPLUS
CN Geldanamycin, 17,17'-(1,5-pentanediyldiimino)bis[17-demethoxy- (9CI)
(CA INDEX NAME)

RN 301643-26-5 CAPLUS CN Geldanamycin, 17,17'-(1,6-hexanediyldiimino)bis[17-demethoxy- (9CI) (CA INDEX NAME)

PAGE 1-C

RN 301643-27-6 CAPLUS CN Geldanamycin, 17,17'-(1,8-octanediyldiimino)bis[17-demethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

PAGE 1-B

301643-28-7 CAPLUS RN

Geldanamycin, 17,17'-(1,10-decanediyldiimino)bis[17-demethoxy- (9CI) CN (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

PAGE 1-B

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 3 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS L4

2000:282715 CAPLUS AN

133:83981 DN

Identification of a geldanamycin dimer that induces the selective ΤI degradation of HER-family tyrosine kinases

Zheng, Fuzhong F.; Kuduk, Scott D.; Chiosis, Gabriela; Munster, Pamela ΑU N.; Sepp-Lorenzino, Laura; Danishefsky, Samuel J.; Rosen, Neal

Program in Cell Biology, Department of Medicine, Memorial Sloan-CS Kettering Cancer Center, New York, NY, 10021, USA

Cancer Research (2000), 60(8), 2090-2094 SO CODEN: CNREA8; ISSN: 0008-5472

American Association for Cancer Research PB

Journal DT

English LΑ

Geldanamycin (GM) is a natural antibiotic that binds Hsp90 and induces AB the degrdn. of receptor tyrosine kinases, steroid receptors, and Raf. It is a potent inhibitor of cancer cells that overexpress HER-kinases, but its effects on other important proteins may cause significant toxicity and limit its clin. use. The authors report the synthesis and identification of a GM dimer, GMD-4c, which had selective activity against HER-kinases. Selectivity was a function of linker length and required two intact GM moieties. GMD-4c is a potent inducer of G1 block and apoptosis of breast cancer cell lines that overexpress HER2, but does not appreciably inhibit the growth of 32D cells that lack HERkinases. GMD-4c could be useful in the treatment of carcinomas dependent on HER-kinases.

280145-12-2 280145-13-3 280145-14-4 ΙT 280145-15-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(identification of a geldanamycin dimer that induces selective degrdn. of HER-family tyrosine kinases in relation to breast cancer inhibition)

280145-12-2 CAPLUS RN

Geldanamycin, 17,17'-(1,4-butanediyldiimino)bis[17-demethoxy- (9CI) (CA CN INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

RN 280145-13-3 CAPLUS
CN Geldanamycin, 17,17'-(1,7-heptanediyldiimino)bis[17-demethoxy- (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as described by E or Z.

PAGE 1-B

'RN 280145-14-4 CAPLUS

Geldanamycin, 17,17'-(1,9-nonanediyldiimino)bis[17-demethoxy- (9CI) (CA CN INDEX NAME)

Absolute stereochemistry. Double bond geometry as described by E or Z.

PAGE 1-B

RN 280145-15-5 CAPLUS CN Geldanamycin, 17,17'-(1,11-undecanediyldiimino)bis[17-demethoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as described by ${\tt E}$ or ${\tt Z}$.

PAGE 1-B

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 11; d his; log y L1 HAS NO ANSWERS

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

(FILE 'HOME' ENTERED AT 11:40:47 ON 09 OCT 2002)

FILE 'REGISTRY' ENTERED AT 11:40:59 ON 09 OCT 2002

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 13 S L1 FUL

FILE 'CAPLUS' ENTERED AT 11:41:40 ON 09 OCT 2002

L4 3 S L3

FILE 'BEILSTEIN' ENTERED AT 11:42:42 ON 09 OCT 2002

L5 0 S L1

FILE 'MARPAT' ENTERED AT 11:43:16 ON 09 OCT 2002

L6 0 S L1

L7 0 S L1 FUL

COST IN U.S. DOLLARS	SINCE FILE	\mathtt{TOTAL}
COST IN C.S. POLIZIE	ENTRY	SESSION
FULL ESTIMATED COST	99.46	253.97
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.86

STN INTERNATIONAL LOGOFF AT 11:44:13 ON 09 OCT 2002

